Community News

Sun powers local students to state win

Seabrook students overcome cloudy skies, take winning solar models to San Antonio

By Kelly Humphries

One of the big lessons learned in this year's solar-powered model cars race at Ed White Elementary School in Seabrook was that things don't always go as planned, everyone needs to be able to adapt.

This was the third year for the "Solar 500" race, supported by a number of JSC volunteers. The top two teams from the Seabrook challenge ended up winning the top two places in the statewide competition held May 16 in San Antonio, said Mike Ewert, one of several JSC civil servants and contractors who helped the fifth-grade students, design, build and run their cars in the school parking lot.

"The nerve-wracking thing about this year was we had clouds that day and we couldn't decide whether to try and do the race or not," Ewert said. "We decided to go for it. The first couple of races were pretty slow, but by the end of the race the cars were zipping along."

"Speedy Split-Second," the car fielded by Mrs. Tammy Oldani's class, won the Seabrook race. On its heels were second-place finisher "The Hearse," and third-place finisher "Grease Lightning." Each car is built by a team of about three-four students.

"For the second year in a row, the winning students from Ed White Elementary went on to statewide competition in San Antonio. This year, they won the top two places," Ewert said.

The race, which is 500 inches long, was dubbed the "Solar 500" three years ago by Cindy Cross, who is from Indiana, the home of the Indianapolis 500. Along with Cross and Ewert, both of Engineering's Crew and Thermal Systems Division, this year's volunteers included Scott Askew, of Engineering's Automation, Robotics and Simulation Division; Elizabeth Kluksdahl and Scott Lazaroff of Engineering's Energy Systems Division; and contractors Dave Oswald of Hamilton Standard, John Schipper of Lockheed and David Bergeron of GB Tech. Also helping out this year were coop Erik Olsen and vocational education student Michael Nguyen.

"From comments the teachers made, they (the students) get a lot of confidence from being able to create something and seeing it run," Ewert said. "We go in trying to teach them a little about solar energy, teamwork and engineering design and they learn some real-world experiences like when things don't work out as they planned they have to adapt."

The innovative educational project, called "Solar Power-Up," was cosponsored by the Texas Solar Energy Society and the JSC Education Outreach team. The Solar Energy Society provided solar photovoltaic panels, motors, gears and other parts for the cars, while JSC provided volunteers who helped the students learn about teamwork, aerodynamics, friction, solar power and other engineering lessons. Parents, teachers and students all praised JSC's involvement in the project, Ewert said.

"We enjoy it," Ewert added, "the solar volunteers that have done it for several years and other people who joined it for the fist time this year. Three of us—Cindy, Erik and I—actually went to San Antonio this year."

The curriculum is designed to teach the students to work in design teams, make group decisions about the engineering problems they encounter, build the model and present details of what they learned to fellow students, teachers and parents.

As the use of solar panels spreads to such common applications such as calculators and crosswalks, organizers hope to introduce students at participating schools to solar power technology and engineering principles.

Top left: JSC volunteers Scott Lazaroff, left, and David Bergeron watch the "Solar 500" model car races as an Ed White Elementary School student celebrates. Top right: Cindy Cross, left, and Scott Lazaroff witness another finish-line celebration. Above: Scott Askew helps a student make a last-minute starting line repair.

Inspection 98 aims to share with community

NASA Johnson Space Center Inspection 98

JSC once again will share the breadth and depth of its work with thousands of industry, business, community, and education leaders when Inspection 98 is held October 14-16.

"This is a terrific opportunity for us to showcase our JSC facilities and technologies," said Kathy Jurica, this year's event chair.

At Inspection 98, JSC will invite thousands to explore the technologies, facilities, and capabilities used to lead the nation's human space flight program. Forums will explain how to use NASA technologies to meet regional and national challenges.

JSC employees will have the opportunity to draw from the experience of the broader community for innovative approaches to their own challenges, and identify areas where partnerships could be mutually advantageous.

The Inspection 98 office staff includes Jurica, Deputy Chairs Robbie LaBrier and Bobbie Gail Swan, Office Manager Rene Hasson and Team NASA Representative Joe Mayer.

Points of contact from every JSC organization will lend support: AH/Stephen Wiggins; AI/Carroll Dawson, AJ/Lupita Armendariz, AP/Steve Nesbitt, AQ/Leon Blum, BA/Donna Blackshear-Reynolds, CA/Pat Forrester, DA/Terry Gobert, EA/Julie Kramer, GA/Scott Morris, HA/ Hank Davis, JA/Ginger Gibson, LA/Cathey Lamb, MA/Joan Baker, NA/Stacey Menard, OA/Lois Lenox, RA/Ray Melton, SA/Melody Anderson, TA/Mike Van Chau, XA/Mary Chesler, and YA/Lindy Fortenberry.

Several committees have been established and already are working to address all of the details. The established committees with their chair are: Audience Development and Publicity, Doug Peterson; Content and Exhibits, Stacey Menard; Registration, Dorothy Rasco and Mary Chesler; Mailings/Programs, Donna Blackshear-Reynolds; Other NASA Centers/Industry, John Stanford; Follow Through, Hank Davis; Hospitality, Lupita Armendariz; Information Technology, Scott Morris; Logistics, Ginger Gibson; Printing/Graphics, Peggy Wooten; Speakers/NASA Alumni, Day-of-Event/Volunteers and Hosts, Natalie Saiz and Mike Kincaid.

To have a successful event, the participation of every employee is needed. Employees who would like to participate on a committee or volunteer to help their organization should contact their directorate/office point-of-contact. Look for the Inspection 98 web page at: http://inspection.jsc.nasa.gov. The internal web page is at: http://www4.jsc.nasa.gov/ inspection/.

For information by more conventional means, call the Inspection 98 office at x41316.

JSC Safety Alert

Barriers and Warnings

What Happened

An unauthorized person opened a gate marked with an "Authorized Personnel" sign during an on-going operation of a training system. This unauthorized entry could have resulted in injury to personnel or an interruption of training. Warning signs and barriers are used to prevent personnel from entering controlled areas where hazards exist.

Outcome of the Investigation

The training areas are frequented by many personnel. Warning signs and barriers are often ignored.

What You Can Do

Access to controlled areas should be coordinated with operations personnel and control offices. Barriers and warning signs should be in place to control access during training and hazardous operations. Everyone is responsible for compliance with warning signs and barriers. All JSC personnel are cautioned to observe all barriers and signs that are put in place for their protection.

Barrios' Johnson earns Rotary Vocational Excellence Award

Sandy Johnson, president of JSC contractor Barrios Technology Inc., recently received the Vocational Excellence Award at the Rotary District 5890 after being named outstanding business person of the year by the Space Center Rotary.

The award was presented at the district assembly held at the University of Houston Hilton. Johnson's nomination was one of 55 submitted from Rotary clubs throughout the district recognizing individuals who excel in their vocations, have made notable achievements, support their communities and "whose efforts make a difference."

Johnson

As president and owner of Barrios since 1993, Johnson has demonstrated a commitment to excellence through attention to employees, customers and the community, the nomination said. Johnson was among the original group of stockholders that formed Barrios in 1980 with the awarding of NASA's Flight Design Support Services Contract.

Barrios currently employs some 300 people and provides information technology, space operations, training and configuration management services to the aerospace industry and commercial markets.

As a community leader, Johnson has given countless hours of volunteer support. Barrios has adopted Bay Area Turning Point, a shelter for battered women and children, and Whitcomb Elementary to enhance the school's math and reading tutoring and mentoring program. Barrios participates in Clear Lake High School's work/study program, and supports many schools during Engineers Week. Barrios also participates in the Adopt a Highway program, providing monthly cleanup of a stretch of NASA Road 1.

She is treasurer for the Clear Lake Area Economic Development Foundation, chair-elect of the Development and Advisory Council for the University of Houston-Clear Lake, and on the board of Spaceweek International and the International Council on Systems Engineering Houston chapter.